RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	_08/4 <i>44</i> ,791A
Source:	. 1FW/6
Date Processed by STIC:	3/22/05

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 03/22/2005
PATENT APPLICATION: US/08/444,791A TIME: 11:53:10

Input Set : A:\40451C.txt

Output Set: N:\CRF4\03222005\H444791A.raw

```
3 <110> APPLICANT: Brockhaus, et al.
 5 <120> TITLE OF INVENTION: Human TNF Receptor
 7 <130> FILE REFERENCE: 01017/40451C
 9 <140> CURRENT APPLICATION NUMBER: US 08/444,791A
10 <141> CURRENT FILING DATE: 1995-05-19
12 <160> NUMBER OF SEQ ID NOS: 26
14 <170> SOFTWARE: PatentIn version 3.3
16 <210> SEO ID NO: 1
17 <211> LENGTH: 2111
18 <212> TYPE: DNA
19 <213> ORGANISM: Homo sapiens
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                                                                         120
26 ccagcactgc cgctgccaca ctgccctgag cccaaatggg ggagtgagag gccatagctg
                                                                         180
28 tetggeatgg geeteteeae egtgeetgae etgetgetge egetggtget eetggagetg
                                                                         240
30 ttggtgggaa tatacccctc aggggttatt ggactggtcc ctcacctagg ggacagggag
                                                                         300
32 aagagagata gtgtgtgtcc ccaaggaaaa tatatccacc ctcaaaataa ttcgatttgc
                                                                         360
34 tgtaccaagt gccacaaagg aacctacttg tacaatgact gtccaggccc ggggcaggat
                                                                         420
36 acggactgca gggagtgtga gagcggctcc ttcaccgctt cagaaaacca cctcagacac
                                                                         480
38 tgcctcagct gctccaaatg ccgaaaggaa atgggtcagg tggagatctc ttcttgcaca
                                                                         540
40 gtggaccggg acaccgtgtg tggctgcagg aagaaccagt accggcatta ttggagtgaa
                                                                         600
42 aaccttttcc agtgcttcaa ttgcagcctc tgcctcaatg ggaccgtgca cctctcctgc
                                                                         660
44 caggagaaac agaacaccgt gtgcacctgc catgcaggtt tctttctaag agaaaacgag
                                                                         720
46 tgtgtctcct gtagtaactg taagaaaagc ctggagtgca cgaagttgtg cctaccccag
                                                                         780
48 attgagaatg ttaagggcac tgaggactca ggcaccacag tgctgttgcc cctggtcatt
                                                                         840
50 ttctttggtc tttgcctttt atccctcctc ttcattggtt taatgtatcg ctaccaacgg
                                                                         900
52 tggaagtcca agctctactc cattgtttgt gggaaatcga cacctgaaaa agagggggag
                                                                         960
54 cttgaaggaa ctactactaa gcccctggcc ccaaacccaa gcttcagtcc cactccaggc
                                                                        1020
56 ttcaccccca ccctgggctt cagtcccgtg cccagttcca ccttcacctc cagctccacc
                                                                        1080
58 tatacccccg gtgactgtcc caactttgcg gctccccgca gagaggtggc accaccctat
                                                                        1140
60 cagggggctg accccatcct tgcgacagcc ctcgcctccg accccatccc caaccccctt
                                                                        1200
62 cagaagtggg aggacagcgc ccacaagcca cagagcctag acactgatga ccccgcgacg
                                                                        1260
64 ctgtacgccg tggtggagaa cgtgcccccg ttgcgctgga aggaattcgt gcggcgccta
                                                                        1320
66 gggctgagcg accacgagat cgatcggctg gagctgcaga acgggcgctg cctgcgcgag
                                                                        1380
68 gegeaataca geatgetgge gaeetggagg eggegeaege egeggegega ggeeaegetg
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70 gagetgetgg gaegegtget cegegacatg gaeetgetgg getgeetgga ggaeategag
                                                                        1500
72 gaggegettt geggeeeege egeeeteeeg eeegegeeea gtetteteag atgaggetge
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74 geceetgegg geagetetaa ggaeegteet gegagatege etteeaacce eaettttte
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76 tggaaaggag gggtcctgca ggggcaagca ggagctagca gccgcctact tggtgctaac
                                                                        1680
78 ccctcgatgt acatagettt teteagetge etgegegeeg eegacagtea gegetgtgeg
                                                                        1740
                                                                        1800
80 cgcggagaga ggtgcgccgt gggctcaaga gcctgagtgg gtggtttgcg aggatgaggg
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82 acgetatgee teatgeeegt tttgggtgte etcaceagea aggetgeteg ggggeeeetg

1860

Input Set : A:\40451C.txt

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100 <400 > SEQUENCE: 2 102 Met Gly Leu Ser Thr Val Pro Asp Leu Leu Leu Pro Leu Val Leu Leu 103 1
103 1
106 Glu Leu Leu Val Gly Ile Tyr Pro Ser Gly Val Ile Gly Leu Val Pro 107
107
111 35 40 45 114 Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys 115 50 55 60 118 Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp 119 65 70 80
114 Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys 115 50 55 60 118 Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp 119 65 70 75 80
115 50 55 60 118 Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp 119 65 70 75 80
118 Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp 119 65 70 75 80
119 65 70 75 80
122 Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu
123 85 90 95
126 Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val
127 100 105 110 130 Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg
130 GIU TIE SEI CYS THE VAI ASP AND THE VAI CYS GIV CYS AND 131 120 125
134 Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe
135 130 135 140
138 Asn Cys Ser Leu Cys Leu Asn Gly Thr Val His Leu Ser Cys Gln Glu
139 145 150 155 160
142 Lys Gln Asn Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu
143 165 170 175
146 Asn Glu Cys Val Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr
147 180 185 190
150 Lys Leu Cys Leu Pro Gln Ile Glu Asn Val Lys Gly Thr Glu Asp Ser
151 195 200 205
154 Gly Thr Thr Val Leu Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu
155 210 215 220
158 Leu Ser Leu Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys
159 225 230 235 240
162 Ser Lys Leu Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu 163 250 255
163 245 250 255 166 Gly Glu Leu Glu Gly Thr Thr Lys Pro Leu Ala Pro Asn Pro Ser
167 260 265 270
170 Phe Ser Pro Thr Pro Gly Phe Thr Pro Thr Leu Gly Phe Ser Pro Val
171 275 280 285
174 Pro Ser Ser Thr Phe Thr Ser Ser Ser Thr Tyr Thr Pro Gly Asp Cys
175 290 295 300
178 Pro Asn Phe Ala Ala Pro Arg Arg Glu Val Ala Pro Pro Tyr Gln Gly

Input Set : A:\40451C.txt

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320
179 305
                        310
182 Ala Asp Pro Ile Leu Ala Thr Ala Leu Ala Ser Asp Pro Ile Pro Asn
                    325
                                         330
186 Pro Leu Gln Lys Trp Glu Asp Ser Ala His Lys Pro Gln Ser Leu Asp
                340
                                    345
187
190 Thr Asp Asp Pro Ala Thr Leu Tyr Ala Val Val Glu Asn Val Pro Pro
191
            355
                                360
194 Leu Arg Trp Lys Glu Phe Val Arg Arg Leu Gly Leu Ser Asp His Glu
                            375
                                                 380
198 Ile Asp Arg Leu Glu Leu Gln Asn Gly Arg Cys Leu Arg Glu Ala Gln
                        390
                                             395
202 Tyr Ser Met Leu Ala Thr Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala
                    405
                                         410
206 Thr Leu Glu Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly
                                     425
                                                         430
207
                420
210 Cys Leu Glu Asp Ile Glu Glu Ala Leu Cys Gly Pro Ala Ala Leu Pro
211
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214 Pro Ala Pro Ser Leu Leu Arg
        450
215
218 <210> SEQ ID NO: 3
219 <211> LENGTH: 2339
220 <212> TYPE: DNA
221 <213> ORGANISM: Homo sapiens
223 <400> SEQUENCE: 3
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226 cccqaqtqct tgagctgtgg ctcccgctgt agctctgacc aggtggaaac tcaagcctgc
                                                                           120
228 actcgggaac agaaccgcat ctgcacctgc aggcccggct ggtactgcgc gctgagcaag
                                                                           180
230 caggagggt geeggetgtg egegeegetg eegaagtgee geeegggett eggegtggee
                                                                           240
232 agaccaggaa ctgaaacatc agacgtggtg tgcaagccct gtgccccggg gacgttctcc
                                                                           300
234 aacacqactt catccacgga tatttgcagg ccccaccaga tctgtaacgt ggtggccatc
                                                                           360
236 cctqqqaatg caagcaggga tgcagtctgc acgtccacgt cccccacccg gagtatggcc
                                                                           420
238 ccaqqqqcaq tacacttacc ccaqccagtg tccacacgat cccaacacac gcagccaagt
                                                                           480
240 ccagaaccca gcactgctcc aagcacctcc ttcctgctcc caatgggccc cagcccccca
                                                                           540
242 gctgaaggga gcactggcga cttcgctctt ccagttggac tgattgtggg tgtgacagcc
                                                                           600
244 ttqqqtctac taataatagg agtggtgaac tgtgtcatca tgacccaggt gaaaaagaag
                                                                           660
                                                                           720
246 cccttgtgcc tgcagagaga agccaaggtg cctcacttgc ctgccgataa ggcccggggt
                                                                           780
248 acacagggcc ccgagcagca gcacctgctg atcacagcgc cgagctccag cagcagctcc
250 ctggagaget eggeeagtge gttggaeaga agggegeeca eteggaacea geeacaggea
                                                                           840
                                                                           900
252 ccaqqcqtqq aqgccagtqq ggccggggag gcccgggcca gcaccgggag ctcagcagat
254 tetteccetg gtggccatgg gacccaggte aatgteacet geategtgaa egtetgtage
                                                                           960
256 agetetgace acageteaca gtgeteetee caagecaget ceacaatggg agacacagat
                                                                          1020
                                                                          1080
258 tecaqeeeet eqqaqteeee qaaqqaegaq eaggteeeet teteeaagga ggaatgtgee
260 tttcggtcac agctggagac gccagagacc ctgctgggga gcaccgaaga gaagcccctg
                                                                          1140
                                                                          1200
262 ccccttggag tgcctgatgc tgggatgaag cccagttaac caggccggtg tgggctgtgt
264 cgtagccaag gtggctgagc cctggcagga tgaccctgcg aaggggccct ggtccttcca
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266 ggcccccacc actaggactc tgaggctctt tctgggccaa gttcctctag tgccctccac
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268 agccqcaqcc tccctctgac ctgcaggcca agagcagagg cagcgagttg tggaaagcct
                                                                          1440
270 ctqctqccat qqcqtqtccc tctcggaagg ctggctgggc atggacgttc ggggcatgct
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272 ggggcaaqtc cctgagtctc tgtgacctgc cccgcccagc tgcacctgcc agcctggctt
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Input Set : A:\40451C.txt

276 278 280 282 284 286 288 290	tetge agage agact gggte teace gttee gcege egttt	agg geg gett geet geg gaga	gc t ga t gg a .ca a .at g .cc a .tg g	ctgg getg tggtt gated geet gtggg	getto geetg geetg ageto eeggeo ageg	cc agg gg	gaaaa cacc getet gaggo cttgg catgo ctata ggttg	accco catg gtgo gtaag gtaag gcag	e ago g aag g aag g aag g ctg a aco e cag g gag	atco gacag ggagg agcat gaggo cccat gctao gccga	gac gagg cac cggg cctc ctca	tete agte tgge ctea tgga tact gaag	geaga getto ageo ateao aaaa geeto geeao	agg g cag d cct g cag g cct g aat a gag g	ggett eetga gtagg gtgea gaggt acaga getge cacto	etggge etetgg aggetg ggaacg agtgge etagga aaatta ggaaat ecagce	1560 1620 1680 1740 1800 1860 1920 1980 2040 2100
	2 tgggcgacag agcgagagte tgteteaaaa gaaaaaaaaa aagcaeegee teeaaatget 4 aaettgteet tttgtaeeat ggtgtgaaag teagatgeee agagggeeea ggeaggeeae											2160					
	6 catattcagt gctgtggcct gggcaagata acgcacttct aactagaaat ctgccaattt											2220					
	3 tttaaaaaag taagtaccac tcaggccaac aagccaacga caaagccaaa ctctgccagc										2280						
	cacatccaac cocccacety coatttycac cotcogoott cactcogyty tycotycay											2339					
	<210>					· J		·						, ,	,	5 5	
	304 <211> LENGTH: 392 305 <212> TYPE: PRT																
	305 <212> TYPE: PRT 306 <213> ORGANISM: Homo sapiens																
	<400>					, , ,	,	_									
	Ser A					Asp	Ser	Cvs	Glu	Asp	Ser	Thr	Tvr	Thr	Gln	Leu	
311		.DP			5			0,70		10			-1-		15		
	Trp A	Asn	Trp	Val	_	Glu	Cvs	Leu	Ser		Glv	Ser	Ara	Cvs		Ser	
315	p			20			0,70		25	-1-	1		5	30			
	Asp G	#1n	Val		Thr	Gln	Ala	Cvs		Ara	Glu	Gln	Asn		Ile	Cvs	
319			35	010		01		40		5		4	45	5		-1	
	Thr C	'vs		Pro	Glv	Trp	Tvr		Ala	Leu	Ser	Lvs		Glu	Glv	Cvs	
323		50	5		1		55	-1-				60			1	- 2	
	Arg I		Cvs	Ala	Pro	Leu		Lvs	Cvs	Ara	Pro	Glv	Phe	Glv	Val	Ala	
327	_					70		-1-	-1-	5	75	1		2		80	
	Arg F	ro	Glv	Thr	Glu	Thr	Ser	Asp	Val	Val	Cvs	Lvs	Pro	Cvs	Ala	Pro	
331	5 -		1		85					90	-1-			- 2	95		
	Gly T	hr	Phe	Ser	Asn	Thr	Thr	Ser	Ser	Thr	Asp	Ile	Cys	Arq	Pro	His	
335	-			100					105		-		•	110			
	Gln I	lle	Cys	Asn	Val	Val	Ala	Ile	Pro	Gly	Asn	Ala	Ser	Arq	Asp	Ala	
339			115					120		•			125		•		
342	Val (Cys	Thr	Ser	Thr	Ser	Pro	Thr	Arg	Ser	Met	Ala	Pro	Gly	Ala	Val	
343		130					135		<u> </u>			140		-			
	His I		Pro	Gln	Pro	Val	Ser	Thr	Arq	Ser	Gln	His	Thr	Gln	Pro	Ser	
347						150					155					160	
350	Pro G	lu	Pro	Ser	Thr	Ala	Pro	Ser	Thr	Ser	Phe	Leu	Leu	Pro	Met	Gly	
351					165					170					175	-	
	Pro S	Ser	Pro	Pro	Ala	Glu	Gly	Ser	Thr	Gly	Asp	Phe	Ala	Leu	Pro	Val	
355				180			•		185	•	-			190			
	Gly I	Leu	Ile		Gly	Val	Thr	Ala		Gly	Leu	Leu	Ile		Gly	Val	
359	•		195		•			200		-			205		-		
	Val A	Asn		Val	Ile	Met	Thr		Val	Lys	Lys	Lys	Pro	Leu	Cys	Leu	
363		210	-				215			_	-	220			-		
	Gln A		Glu	Ala	Lys	Val	Pro	His	Leu	Pro	Ala	Asp	Lys	Ala	Arg	Gly	
367		_			-	230					235	-	-		_	240	

Input Set : A:\40451C.txt

```
370 Thr Gln Gly Pro Glu Gln Gln His Leu Leu Ile Thr Ala Pro Ser Ser
                        245
                                             250
    374 Ser Ser Ser Leu Glu Ser Ser Ala Ser Ala Leu Asp Arg Arg Ala
                    260
                                        265
    378 Pro Thr Arg Asn Gln Pro Gln Ala Pro Gly Val Glu Ala Ser Gly Ala
    382 Gly Glu Ala Arg Ala Ser Thr Gly Ser Ser Ala Asp Ser Ser Pro Gly
                                 295
     386 Gly His Gly Thr Gln Val Asn Val Thr Cys Ile Val Asn Val Cys Ser
                            310
    390 Ser Ser Asp His Ser Ser Gln Cys Ser Ser Gln Ala Ser Ser Thr Met
                                             330
                        325
    394 Gly Asp Thr Asp Ser Ser Pro Ser Glu Ser Pro Lys Asp Glu Gln Val
    395 340
                                        345
    398 Pro Phe Ser Lys Glu Glu Cys Ala Phe Arg Ser Gln Leu Glu Thr Pro
                                    360
    402 Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys Pro Leu Pro Leu Gly Val
                                 375
            370
     406 Pro Asp Ala Gly Met Lys Pro Ser
     410 <210> SEQ ID NO: 5
     411 <211> LENGTH: 28
     412 <212> TYPE: PRT
     413 <213> ORGANISM: Artificial sequence
     415 <220> FEATURE:
     416 <223> OTHER INFORMATION: Synthetic peptide
     419 <220> FEATURE:
     420 <221> NAME/KEY: misc_feature
     421 <222> LOCATION: (25)..(25)
     422 <223> OTHER INFORMATION: Xaa = unknown amino acid
     424 <400> SEQUENCE: 5
     426 Leu Val Pro His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro
     427 1
W--> 430 Gln Gly Lys Tyr Ile His Pro Glu Xaa Asn Ser Ile
                   20
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     435 <212> TYPE: PRT
     436 <213> ORGANISM: Artificial sequence
     438 <220> FEATURE:
     439 <223> OTHER INFORMATION: Synthetic peptide
     441 <400> SEQUENCE: 6
     443 Ser Thr Pro Glu Lys Glu Gly Glu Leu Glu Gly Thr Thr Thr Lys
     447 <210> SEQ ID NO: 7
     448 <211> LENGTH: 18
     449 <212> TYPE: PRT
     450 <213> ORGANISM: Artificial sequence
     452 <220> FEATURE:
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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/08/444,791A

DATE: 03/22/2005 TIME: 11:53:11

Input Set : A:\40451C.txt

Output Set: N:\CRF4\03222005\H444791A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 25 Seq#:10; Xaa Pos. 8 Seq#:11; Xaa Pos. 2 Seq#:14; Xaa Pos. 9,10,13

VERIFICATION SUMMARY

PATENT APPLICATION: US/08/444,791A

DATE: 03/22/2005 TIME: 11:53:11

Input Set : A:\40451C.txt

Output Set: N:\CRF4\03222005\H444791A.raw

L:430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
L:509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:533 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0